TESTING EMOTION DYSREGULATION AS A MODERATOR IN AN INTERPERSONAL PROCESS MODEL OF INTIMACY IN COUPLES

A Dissertation

by

RACHAEL LEANN HERRINGTON

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2008

Major Subject: Psychology

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Approved by:

Chair of Committee,	Douglas K. Snyder
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ABSTRACT

Testing Emotion Dysregulation as a Moderator in an Interpersonal Process Model of Intimacy in Couples. (August 2008)

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Chair of Advisory Committee: Dr. Douglas K. Snyder

Although theorists, researchers, and therapists alike emphasize emotional intimacy as an important aspect of a couple's relationship, empirical data to understand the underlying processes behind this concept are lacking. The purpose of this study is to examine Reis and Shaver's interpersonal process model of intimacy in a community sample of couples and to contribute to the current understanding of constructs that may moderate the process of intimacy. Reis and Shaver's model suggests that vulnerable self-disclosure by one partner, coupled with empathic responding by the other partner, results in greater subjective emotional intimacy. Previous studies have examined this interpersonal process model in a sample of community couples in committed romantic relationships. The present study aims to contribute to the extant literature by testing emotion dysregulation as a potential moderator in Reis and Shaver's interpersonal process model of intimacy. Multilevel modeling was used to analyze data from 108 community couples. Couples completed measures and were asked to participate in videotaped interactions in which each partner discussed a time that someone other than the partner hurt their feelings (low threat condition) and a time the partner hurt their

feelings (high threat condition). For each interaction, partners were assigned to a designated role (speaker or listener). Results lend support to Reis and Shaver's interpersonal process model of intimacy suggesting that both vulnerable self-disclosure and empathic responding by the partner are key components to one's subjective experience of emotional intimacy. Results also lend support to the idea that emotion dysregulation moderates the relation between self-disclosure, empathic responding, and resulting post-interaction intimacy; however, when measuring how emotion dysregulation affects post-interaction intimacy within this study, results varied based on whose intimacy was being measured (speaker or listener) and based on the condition (low or high threat.) Clinical implications as well as directions for future research were discussed.

To the late Jana Ilene Joseph, my dear friend and colleague—you were an integral part of my personal and professional growth, and you are dearly missed

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I would especially like to thank my committee chair, Dr. Douglas K. Snyder, for his guidance, support, and mentorship throughout my training at Texas A&M University. I certainly would not be where I am today as a researcher and clinician if it were not for his encouragement and faith that a small town girl from Oklahoma has a place in higher education. I would also like to thank my committee members whose unique contributions made this a better project. Dr. Morey was an integral part in encouraging me to utilize resources I already had in conducting my dissertation research, Dr. Doss generously gave of his time and energy to guide and teach me multilevel modeling for this project, and Dr. Rae agreed to take over as my outside committee at the last minute and remained on my committee, even after having heart surgery.

I would also like to extend my deepest thanks and appreciation to my friend and colleague Alexandra Mitchell for all her encouragement, support, and late-night advice throughout our time in graduate school and internships. Jana Joseph and Angela Castellani also played a critical role in the development of this project.

Finally, I would like to express my sincerest gratitude to my family, who has been a continual blessing to me. My mother Ramona and sister Sara have endured numerous phone calls for prayer and support. My niece Chloe has been my personal cheerleader and biggest fan. My husband Nathan has taken on extra responsibilities to make it possible for me to finish this project, and he has remained by my side through some of the toughest times in my life. My grandparents and other siblings have all been sources of support and encouragement. I am so appreciative of all they have done.

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INTRODUCTION

Theoretical models regarding relationship intimacy abound in the literature, but few of them have been tested empirically. The model to be tested in this particular study is Reis and Shaver's (1988) interpersonal process model of intimacy. They posited that intimacy is "an interpersonal process that involves communication of personal feelings and information to another person who responds warmly and sympathetically." This response of warmth and sympathy "validates the first person's experiences, and thereby deepens the relationship and encourages returned affection and support" (Reis & Shaver, 1988, p. 375). Reis and Shaver (1988) described intimacy as the function of a transactional process between partners in which both self-disclosure (speaker/discloser) and partner responsiveness (listener/respondent) are key components. A further distinction was made between factual disclosure (e.g., "I've dated three people seriously in my lifetime") and emotional disclosure (e.g., "After the loss of my last relationship, I'm not sure I can ever feel that way about someone else"). Emotional self-disclosure, relative to factual self-disclosure, is believed to produce greater intimacy because emotional self-disclosure yields the opportunity for the listener to show support for core aspects of the discloser's view of his or her own self (Reis & Shaver, 1988). Testing conditions potentially moderating this model is the basis for this paper.

Some of the most prominent empirical research on the interpersonal process model of intimacy has been conducted by Laurenceau and colleagues. Laurenceau,

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This dissertation follows the style of the *Journal of Family Psychology*.

Barrett, and Pietromonaco (1998) tested multiple components of the model within the environmental context of daily, naturally occurring interpersonal interactions, which allowed for analysis of the intimacy process on an interaction-by-interaction basis, consistent with the theoretical underpinnings of Reis and Shaver (1988). Their goal was to test the model of intimacy at the level of individual social interactions. To do so, they had 69 undergraduate students from two different universities use an event-contingent diary method to track information immediately following any interpersonal interaction lasting at least ten minutes. This tracking of interactions occurred over a one-week period, and participants reported on their own self-disclosure, their partner's disclosure, their perception of their partner's responsiveness, and the degree of intimacy they felt as a result of the interaction. Results at the basic level of social interaction supported Reis and Shaver's (1988) interpersonal process model of intimacy. Intimacy was significantly predicted across a range of interpersonal interactions and social relationships by both self-disclosure and partner disclosure. A second study by the same researchers was conducted to replicate and extend the findings from the first study, and 89 participants were recruited to track their interactions over the course of two weeks. Results again supported Reis and Shaver's model and revealed that on average, intimacy was predicted by self- and partner-disclosure. The second study also found that emotional self-disclosures are, in fact, more predictive of intimacy than factual self-disclosures, as was theorized by Reis and Shaver (Laurenceau, Barrett, & Pietromonaco, 1998).

Laurenceau and colleagues (1998) acknowledged limitations to their studies. They reported that although their findings supported the directional hypotheses of Reis and Shaver (1988), the correlational nature of the study could not rule out the possibility of reverse causal effects, whereby intimacy actually caused partner responsiveness, rather than the other direction. Additionally, other variables not considered could potentially account for the observed effects. Neither did the study use responses from both partners of each interaction, so the interpersonal model was examined using only one person's subjective perspective. Lastly, because undergraduate participants were used, it is questionable how well this model would generalize to other individuals.

A more recent empirical study was conducted by Laurenceau, Barrett, and Rovine (2005), using daily-diary self-reports of interpersonal interactions in the context of marriage to assess predictions from intimacy as conceptualized from an interpersonal process model perspective. In this study, both marital partners (96 total couples) assessed their level of self-disclosure, their partner's disclosure, their perception of their partner's responsiveness, and intimacy, daily over the course of 6 weeks. Rather than adopting an interaction-to-interaction basis, in this study couples completed the rating form each evening. The intimacy of both husbands and wives was significantly predicted by self-disclosure and partner-disclosure on a day-to-day basis. Perception of spouse-responsiveness also emerged as a significant predictor of daily ratings of intimacy, and the impact of disclosures by self and partner was partially explained by simultaneous increases in perceived partner responsiveness. Also notable was that results suggested a distinction between daily intimacy and global satisfaction. When

compared with Laurenceau et al.'s (1998) study, results revealed that partner responsiveness plays a more important role in the experience of intimacy in marital relationships than in other forms of interpersonal relationships. This finding is consistent with the findings in prior studies (Reis, Clark, & Holmes, 2004).

Gender differences were also found in Laurenceau et al.'s (2005) study. Increases in wives' intimacy were more dependent on "feeling understood, validated, accepted, and cared for by one's partner" relative to men's intimacy. Self-disclosure was a stronger predictor of husbands' intimacy relative to wives, possibly suggesting that felt intimacy is more dependent on revealing aspects of oneself rather than on the partner's actual response. Similar limitations to the (1998) study were acknowledged, with one difference being that interactions were recorded at the end of each day rather than on an interaction-to-interaction basis, which is different from Reis and Shaver's (1988) conceptualization of intimacy based on individual interactions.

A more recent study by Castellani et al. (2006) tested the interpersonal process model of intimacy by collecting data from both disclosers and listeners in a situation where they were asked to talk to their partner about a time that someone other than their partner hurt their feelings (Hurt by Other) and a time that their partner hurt their feelings (Hurt by Partner). The "hurt by other" interaction was regarded as a low-threat condition, whereas the "hurt by partner" interaction was regarded as a high-threat condition. Each partner reported on perceived self-disclosure, empathic responding, and feelings of intimacy following each interaction, and the study design allowed for the assessment of each variable from both individuals' perspectives. Results indicated that

initiators of discussions experienced greater intimacy post-interaction if they also reported greater self-disclosure. No partner effect was found for perceived self-disclosure, indicating that the initiator's own intimacy was not affected by his or her partner's perception of the initiator's self-disclosure.

The second model when tested in listeners indicated that a significant actor effect existed, suggesting that a listener's perception of his or her partner's self-disclosure when speaking affected the level of the listener's intimacy. No partner effect was found for the listener's perception of speaker's self-disclosure, indicating that the listener's intimacy was not affected by the speaker's perceived level of their own self-disclosure.

Additionally, initiators who perceived their partner to be empathic during the discussion reported greater levels of intimacy. No partner effect was found for empathy, indicating that the speaker's intimacy was not affected by the listener's perception of their own empathy. For responders, those who reported being empathic during the discussion also reported greater levels of intimacy. No partner effect was found, indicating that the listener's level of intimacy was not affected by the speaker's perception of the listener's empathy.

To test the combined effect of self-disclosure and empathy on intimacy, Castellani et al. (2006) created a product term entitled emotional connection. For speakers, a significant actor effect was found for emotional connection, suggesting that the speaker's level of intimacy was affected by his or her own perception of emotional connection. No partner effect was found, indicating that the speaker's intimacy was not affected by listener's report of emotional connection.

The effect of emotional connection on the listener's intimacy was also tested. A significant actor effect was found indicating that a listener's intimacy was affected by his or her own report of emotional connection. No partner effect for emotional connection was found, indicating that a listener's level of intimacy was not affected by the speaker's report of emotional connection.

Using the same methodology as Castellani et al. (2006), another study by Mitchell et al. (2008) addressed similar questions, but analyses were based on observational data rather than self-report. Further support for the interpersonal process model of intimacy was found. While no significant gender-moderated actor or partner effects were found in Castellani et al.'s study, gender differences were found in this observational study. Men's own self-disclosure and empathic responding predicted their post-interaction levels of intimacy. In contrast, women's post-interaction intimacy was not predicted by their own behavior but by their partner's self-disclosure and empathic responding.

Emotion Dysregulation

Another unique area of interest for the current study involves the concept of emotion regulation or dysregulation. In the past two decades, considerable research in the field of emotion regulation has emerged. Various theories regarding emotion regulation have been developed, and researchers have begun to emphasize that both positive and negative emotions may need to be regulated if one is to manage relationships with others (Gross, 1998; Gross, Richards, & John, 2006). Additionally, clinical interventions have begun to focus on both the expression of emotion and the

experience of emotion. In considering how the field of emotion regulation has emerged, and in using an evolutionary perspective, Gross (1998) defined emotion regulation as "the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (p. 275). He further posited that processes to regulate emotions are sometimes automatic or controlled, and sometimes conscious or unconscious.

More recently, Gross, Richards, and John (2006) posited a complex, process model of emotion regulation. The model, at the broadest level, distinguishes between two types of emotion regulation strategies, antecedent-focused and response-focused. Antecedent-focused strategies are those one uses *before* emotion response tendencies have become fully activated and have affected the behavior and physiological responding. The goal of antecedent-focused strategies is the modification of future emotional responses. This may include cognitively re-evaluating or reinterpreting another's comment so as to regulate emotion. Response-focused strategies, on the other hand, involve regulation efforts after the response tendencies are already activated and an emotional response is already underway. The goal of response-focused strategies is to manage emotions that already exist (Gross, Richards, & John, 2006).

The process model of emotion regulation also has more specific strategies that can be accessed along the timeline of the emotion process. One's choice to approach or avoid certain people, places, or activities as to regulate emotion is referred to as situation selection. For example, a couple may choose to avoid the place of employment of one partner's ex-spouse so as to avoid a potential conflict. This same couple may choose to

spend time with another couple with whom they can share a good laugh. After a situation is selected, situation modification can be used to create different situations, thus attempting to modify its emotional impact. Attentional deployment is another strategy in the timeline whereby one chooses which aspects of a situation to focus on. The next strategy includes cognitively changing the meaning one attaches to the situation. Response modulation is a response-focused strategy whereby one attempts to influence emotion response tendencies after they have already been activated. In this strategy, one may attempt to increase or decrease certain behavioral responses, or alter their experience or physiology (Gross, 2001; Gross, Richards, & John, 2006). Keefe, Porter, and Labban (2006) utilized this process model as a framework for categorizing coping skills used in partner-assisted pain coping skills training.

In assessing emotion regulation specifically within the context of clinical psychology, studies show that in 50% of DSM-IV Axis I disorders, emotion dysregulation is implicated, and it is implicated in all Axis II disorders (American Psychiatric Association, 1994; as cited in Gross, 1998). Additionally, Eisenberg and Fabes (1992) found that in children, lower social competence and decreased peer acceptance and liking are predicted by poor emotion regulation in combination with high levels of negative emotion, even within the normal range of functioning. Kirby and Baucom (2007) reported preliminary findings from the development of a couple-based intervention for couples where one or both partners had chronic difficulties regulating emotions.

Gratz and Roemer (2004, pp. 42-43), on the basis of others' prior theoretical and empirical research on emotion regulation, conceptualized emotion regulation as involving the "awareness and understanding of emotions, acceptance of emotions, ability to control impulsive behaviors and behave in accordance with desired goals when experiencing negative emotions, and the ability to use situationally appropriate emotion regulation strategies flexibly to modulate emotional responses as desired in order to meet individual goals and situational demands." A self-report measure developed by Gratz and Roemer (2004) was based on this definition, and it also includes specific subcomponents of emotion regulation of interest in this study that may moderate the relations among self-disclosure, empathic responding, and resulting intimacy. The specific subcomponents of emotion regulation included in the measure are nonacceptance of emotional responses, difficulties engaging in goal-directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity (Gratz & Roemer, 2004). A clearer understanding of such specific components of emotion regulation, and their impact on the interpersonal process model of intimacy, could provide useful information to inform treatment.

Purpose of the Present Study

In the past decade, several empirical studies testing Reis and Shaver's (1988) interpersonal process of model of intimacy have emerged. To date, studies have included as participants undergraduate students and married couples from a community sample. Lacking in the extant literature is assessment of conditions under which the

interpersonal process model may not hold. The purpose of the present study is to test emotion dysregulation as a moderator of Reis and Shaver's (1988) interpersonal process model of intimacy. The interpersonal process model of intimacy posits that interactions involving self-disclosure and partner responsiveness (empathic responding) will result in subjective feelings of emotional intimacy. Emotion dysregulation as a moderator of relationship intimacy is of primary concern for several reasons. Previous studies with children have shown that even within the normal range of functioning, one's inability to regulate emotion in conjunction with high levels of negative emotion predicts both lower social competence and decreased levels of peer acceptance and liking (Eisenberg & Fabes, 1992). Additionally, the context in which problems with emotion regulation occur is likely an interpersonal context (Fruzetti & Iverson, 2006), and even if only one partner has a problem with emotions, emotion dysregulation affects both partners involved in the intimate relationship (Kirby & Baucom, 2007). It was anticipated that this study would provide a deeper understanding of factors that help sustain intimacy processes as well as factors that contribute to the breakdown of intimacy, thus yielding important treatment implications for distressed couples.

The first hypothesis tested was that higher levels of emotion dysregulation predict lower levels of enduring, baseline emotional intimacy. The second hypothesis tested was that higher levels of emotion dysregulation predict lower levels of intimacy post-interaction, and this hypothesis was tested separately for speaker and listener, in both the low and high threat conditions. The "hurt by other" interaction was regarded as a low-threat condition, whereas the "hurt by partner" interaction was regarded as a high-

threat condition, just as in Castellani et al. (2006). The final hypothesis tested was that the overall level of emotion dysregulation moderates the relation between self-disclosure, empathic responding, and resulting post-interaction intimacy. This hypothesis was also tested for the speaker and listener, in both the low and high threat conditions.

METHOD

Participants

A community sample of 108 couples (216 individuals) was recruited from Bryan/College Station using a random phone sampling technique, posted notices, and referral from past participants. Participants were required to be dating or married, 18 years of age or older, in an opposite-sex relationship, and they must have cohabitated for at least six months. Participants were compensated by being entered into a drawing for prizes that ranged in value from $5-$20. Each couple also received a packet containing information on relationship enhancement, helpful and detrimental communication habits, and strategies for increasing positivity in the relationship.

The majority of couples in the sample were married (88%), and the average age of participants was 41 years old (*SD* = 14.9). The average length of relationship was 13.5 years (*SD* = 13.6), and the average level of education was 16 years (*SD* = 2.7). Ethnic representation of the sample included Caucasian (91%), Hispanic American (6%), Asian American (2%), and African American (1%) participants. Mean *T* scores of 44.4 (*SD* = 15.3) on the Global Distress Scale of the Marital Satisfaction Inventory—Revised (MSI—R; Snyder, 1997) indicate that the overall sample was less distressed than the standardization sample for this measure of marital distress.

Measures

Respondents completed an extensive battery of measures, and the measures of interest for this study can be found in Appendix A. Descriptions of the measures are provided below:

Marital Satisfaction Inventory—Revised: The MSI—R (Snyder, 1997) is a multidimensional self-report instrument assessing marital distress and marital satisfaction. For this study, administration included three scales of the MSI—R composed of 36 True/False items, including the Global Distress scale (GDS), the Disaffection scale (DAF), and Disharmony scale (DHR). The GDS items measure overall relationship satisfaction, the DAF items measure emotional support and intimacy, and the DHR items reflect overt conflict and deficits in problem-solving (Snyder & Regts, 1982). The MSI—R has been used routinely in research with both community and clinic couples (Snyder & Aikman, 1999). Mean scores on this administration were 2.69 (SD = 3.62) for men and 3.36 (SD = 4.39) for women. The Global Distress scale for this administration yielded an overall internal consistency alpha coefficient of 0.89. The mean inter-item correlation was 0.28.

Personal Assessment of Intimacy in Relationships (PAIR). The Emotional Intimacy subscale of the PAIR (Schaefer & Olson, 1981) was used to measure partners' overall feelings of intimacy in their relationship before engaging in the videotaped interactions designed for this study. The Emotional Intimacy scale has 6 items and uses a 5-point Likert scale (strongly agree to strongly disagree) to assess partners' overall perceived intimacy in the relationship. Items are calculated to yield a total score for this subscale, with a higher number indicating greater relationship intimacy. The PAIR is one of the most commonly used measures of relationship intimacy for both clinic and community couples (Denton et al., 2000; Talmadge & Dabbs, 1990). The mean score for men on this administration was 23.90 (SD = 4.29), and it was 22.83 (SD = 4.83) for

women. The overall internal consistency coefficient alpha was 0.83 for this administration of the PAIR, and the mean inter-item correlation was 0.46.

Difficulties in Emotion Regulation Scale (DERS). The DERS (Gratz & Roemer, 2004) is a 36-item, self-report measure assessing individuals' typical levels of emotion regulation and dysregulation. It was administered before the partners engaged in the videotaped interactions. Individuals also completed an 8-item parallel partner-report version of the DERS that described their partner's ability to regulate their emotions when upset. The mean score for men on this administration of the DERS was 82.19 (SD = 8.72), and it was 79.72 (SD = 11.26) for women. For the partner report of the DERS, men had a mean of 32.19 (SD = 6.33) and women had a mean of 34.26 (SD = 6.28). Internal consistency coefficient alphas for this administration of the DERS and the partner report of the DERS were 0.91 and 0.89 respectively. Mean inter-item correlations were 0.35 and 0.53 respectively. One advantage of this measure over similar measures is that its items are based on an integrative conceptualization of emotion regulation. This measure assesses various aspects of emotion regulation including awareness, understanding, and acceptance of emotions; the ability to behave in accordance with desired goals regardless of the emotion being experienced; and the ability to use situationally-appropriate emotion regulation strategies flexibly to modulate emotional responses as desired in order to meet individual goals and situational demands. Factor analysis of the 36 items of the DERS revealed six subcomponents (Gratz & Roemer, 2004), some of which were of interest in this study. The factors were described as nonacceptance of emotional responses, difficulties engaging in goal-

directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity. Three of the subscales were combined for use in measuring one's own emotion dysregulation for this study, including difficulties engaging in goal-directed behavior, impulse control difficulties, and limited access to emotion regulation strategies. This decision was based on the conceptualization of emotion dysregulation as an undercontrol or underregulation of emotion for the purposes of this study, as distinguished from an overregulation of emotions or an inability to access emotions. Goldman and Greenberg (2006) provide further discussion on this important distinction. It is also important to note that this measure assessed enduring or baseline emotion dysregulation and not situational emotion dysregulation resulting from the interactions designed for this study.

Measure of Intimate Events. Directly following each videotaped interaction, each participant completed the Measure of Intimate Events, an intimacy measure adapted for this study from Prager and Buhrmester's (1998) Interaction Record Form – Intimacy (IRF-I). The IRF-I has been used with couples to measure partners' feelings of self-disclosure, empathy, and intimacy directly following an interaction (Lippert & Prager, 2001). The Measure of Intimate Events is a 17-item, self-report measure based on a 4-point Likert scale from 1 (not at all true of this interaction) to 4 (very true of this interaction). A slight modification was made from the original measure for this study to independently address speaker (discloser) and listener (responder) perceptions of self-disclosure, empathy, and emotional intimacy. Parallel versions for speaker and listener were developed and differ only in terms of perspective. The measure can be found in the

Appendix and shows which items loaded on measures of self-disclosure, empathic responding, and intimacy. One item from each version for speaker (I was critical of my partner) and listener (My partner was critical of me) was considered for inclusion but was omitted in the final analyses because of its effect on internal consistency. Descriptive statistics for each component of this measure can be found in Table 1. Intimacy was measured in the low threat condition for speakers (alpha = 0.57), in the high threat condition for speakers (alpha = 0.79), in the low threat condition for listeners (alpha = 0.67) and in the high threat condition for listeners (alpha = 0.80). Mean inter-item correlations were 0.19, 0.39, 0.28, and 0.42, respectively. Self-disclosure was measured in the low threat condition for speakers (alpha = 0.38), in the high threat condition for speakers (alpha = 0.51), in the low threat condition for listeners (alpha = 0.57), and in the high threat condition for listeners (alpha = 0.55). Mean inter-item correlations were 0.18, 0.22, 0.27, and 0.25, respectively. Empathic responding was measured in the low threat condition for speaker (alpha = 0.77), in the high threat condition for speaker (alpha = 0.83), in the low threat condition for listener (alpha = 0.67), and in the high threat condition for listener (alpha = 0.80). Mean inter-item correlations were 0.41, 0.51, 0.32, and 0.47, respectively.

Design and Procedure

Upon arrival at the research location (couple's choice of their home or the Texas A&M University Psychology Clinic), each partner was given the first set of general measures. Participants were instructed to answer items independently and not to share answers until after the researchers left the home or participants left the clinic. After the

first set of measures was completed, the participants were asked to complete the Measure of Hurt Feelings, which was developed specifically for this study as a way to elicit recollection of a time when (a) the discloser's feelings were hurt by someone other than his or her partner (denoted as the low-threat discussion), and (b) the discloser's feelings were hurt by his or her partner (denoted as the high-threat discussion). Participants were asked to select a topic subjectively ranging in severity from 5 to 7 on a full scale of 1 to 10. After recalling and writing about a time of hurt feelings, participants were asked to rank the severity of hurt feelings, with the goal of keeping within the given range. Participants were informed that their topic of choice would then be discussed during a videotaped interaction task. Directly following the videotaped interactions, participants completed the Measure of Intimate Events.

Potential order effects were addressed in the data collection by alternating the gender of first disclosers. In half of the couples, the male partner went first on the "hurt by other" interaction, and the female partner went second. The roles were reversed in the remaining half of the couples. Within the dyad, the partner who went first for the "hurt by other" interaction went second for the "hurt by partner" interaction. "Hurt by other" interactions always went before "hurt by partner" interactions so that residual effects in terms of participants' affect in the "high threat" interaction were minimized.

Data Analysis

Analyzing relational dyadic data in any form (e.g., romantic partners, parent-child, teacher-student) is complex from a statistical standpoint due to a violation of the basic assumption of independent data. By its very definition, a relationship implies that

there is an association or connection between the parties involved. This association or connection is known to cause a basic violation of the assumption of independent data, also known as "nonindependence" or "interdependence" because responses from partners are often correlated (Campbell & Kashy, 2002; Kashy & Kenny, 2000; Kenny, 1995; Kenny & Cook, 1999; Kenny, Kashy, & Cook, 2006).

Another consideration relevant to choosing a specific data-analytic technique discussed by Kenny and Kashy (1991) and Kenny, Kashy, and Cook (2006) involves distinguishing between two types of interdependence: within- and between-dyad. They clarify that within-dyad interdependence, in any given dyad, is measured over time and is interdependent sequentially. For example, a husband may yell at his wife, who then responds by yelling back at her husband. Kenny and Kashy (1991) further clarify that another type of interdependence is measured generally at one point in time and across dyads, which is between-dyad interdependence. An example of this form of interdependence would be the degree to which relationship satisfaction scores for women are related to relationship satisfaction scores for men in romantic relationships. These distinctions and implications of such were considered in determining which statistical procedures and analyses best fit this study.

Given the questions regarding this data set and the above considerations, multilevel modeling, commonly referred to as hierarchical linear modeling (HLM), was used for data analysis. As the name implies, there are multiple levels within the data that can be analyzed. In other words, there is a hierarchy of units, where one set of units is nested within another set. Although there are other forms of nesting, the focus here is on

partners who are nested within a couple dyad. Two levels exist in the basic multilevel model. The lower level is level 1, which is the person; the upper level is level 2, which is the dyad.

Kenny, Kashy, and Cook (2006) note that variables can also be characterized by level. A variable for which a score is obtained for each lower-level unit is a level 1 variable, and the outcome measure is always a level 1 variable in multilevel modeling. Level 2 variables, which are not of concern in this particular study, would be those variables measured for upper-level units, and the score on a level 2 variable would be the same for all of the level 1 units nested within the level 2 unit.

It should be emphasized that the determination of nonindependence is partially an empirical question and is partially theoretical. Given that the present study examined partners who have chosen to be in a relationship (as opposed to randomly assigned strangers meeting for the first time), there are both empirical and theoretical reasons to address issues of interdependence, which is why multilevel modeling was chosen over multiple linear regression.

RESULTS

Hypothesized Model 1

Multilevel, or hierarchical models, are those in which data can be analyzed at different levels of analysis without violating assumptions of independent observations in multiple linear regression (Tabachnick & Fidell, 2007). To control for interdependence inherent in dyadic data analysis, multilevel modeling was used to analyze the effect that emotion dysregulation has on levels of emotional intimacy. The first hypothesis to be tested was that higher levels of emotion dysregulation predict lower levels of enduring, baseline emotional intimacy, as measured by the PAIR pre-measure. The main effects of one's own emotion dysregulation and perception of the partner's emotion dysregulation, as well as the interaction effect of one's own emotion dysregulation and perception of the partner's emotion dysregulation on enduring, baseline emotional intimacy were estimated at Level 1 with the following equation:

$$\text{PAIR} = \beta_{0ij} + \beta_1(\text{own emotion dysregulation})_{ij} + \beta_2(\text{perception of partner's emotion dysregulation})_{ij} + \beta_3(\text{own emotion dysregulation} \times \text{perception of partner's emotion dysregulation})_{ij}.$$

Results indicated that one's own emotion dysregulation was predictive of one's own enduring, baseline emotional intimacy as measured by the PAIR, when controlling for perception of partner's emotion dysregulation, with higher levels of emotion dysregulation predicting lower levels of intimacy ($p < .01$; Table 2). That is, an inability to control one's emotions reduces one's feeling of experiencing emotional intimacy. Perception of partner's emotion dysregulation was also predictive of one's own

enduring, baseline emotional intimacy, when controlling for one's own emotion dysregulation ($p < .01$; Table 2). The interaction between one's own emotion dysregulation and perception of partner's emotion dysregulation was nonsignificant.

Hypothesized Model 2

The second hypothesis to be tested was that higher levels of emotion dysregulation predict lower levels of intimacy post-interaction. This hypothesis was tested separately for speaker's and listener's post-interaction intimacy, and it was tested in both the low and high threat conditions. It was also tested while controlling for enduring, baseline emotional intimacy as measured by the PAIR pre-measure. The main effects of one's own emotion dysregulation and perception of the partner's emotion dysregulation, as well as the interaction effect of one's own emotion dysregulation and perception of the partner's emotion dysregulation on post-interaction emotional intimacy were estimated at Level 1 with the following equations:

$$\text{Speaker post-interaction intimacy} = \beta_{0ij} + \beta_1(\text{own emotion dysregulation})_{ij} + \beta_2(\text{perception of partner's emotion dysregulation})_{ij} + \beta_3(\text{own emotion dysregulation} \times \text{perception of partner's emotion dysregulation})_{ij}$$

and

$$\text{Listener post-interaction intimacy} = \beta_{0ij} + \beta_1(\text{own emotion dysregulation})_{ij} + \beta_2(\text{perception of partner's emotion dysregulation})_{ij} + \beta_3(\text{own emotion dysregulation} \times \text{perception of partner's emotion dysregulation})_{ij}.$$

Speaker's Post-Interaction Intimacy. In the low threat condition, results suggested that perception of partner's emotion dysregulation was predictive of the

speaker's level of intimacy post-interaction when controlling for one's own emotion dysregulation ($p < .05$; Table 3), such that higher levels of emotion dysregulation predicted lower levels of post-interaction intimacy. However, one's own emotion dysregulation did not predict the speaker's experience of emotional intimacy when controlling for perception of partner's emotion dysregulation. The interaction between one's own emotion dysregulation and perception of partner's emotion dysregulation was found to be nonsignificant. In the high threat condition, different findings emerged. Specifically, one's own emotion dysregulation predicted the speaker's experience of emotional intimacy when controlling for perception of partner's emotion dysregulation ($p < .01$; Table 3), but perception of partner's emotion dysregulation was nonsignificant when controlling for one's own emotion dysregulation, as was the interaction between the two.

These analyses were also run in both the low and high threat conditions while controlling for enduring, baseline emotional intimacy (Table 4). When baseline emotional intimacy was controlled, one's own emotion dysregulation and perception of partner's emotion dysregulation, as well as the interaction between the two, were no longer significant for these two conditions, indicating that pre-existing levels of intimacy were accounting for the observed effects of emotion dysregulation.

Listener's Post-Interaction Intimacy. In the low threat condition, the listener's post-interaction intimacy was predicted by perception of partner's emotion dysregulation when controlling for one's own emotion dysregulation ($p < .05$; Table 5), such that higher levels of emotion dysregulation predicted lower levels of post-interaction

intimacy. As with speaker post-interaction intimacy in the low threat condition, one's own emotion dysregulation was not found to be predictive of the listener's post-interaction intimacy when controlling for perception of partner's emotion dysregulation, nor was the interaction between one's own emotion dysregulation and perception of partner's emotion dysregulation significant in the low threat condition. In the high threat condition, as in the low threat condition, one's own emotion dysregulation was significantly predictive of the listener's post-interaction intimacy when controlling for perception of partner's emotion dysregulation ($p < .01$; Table 5). Also predictive of listener's post-interaction intimacy in the high threat condition was perception of partner's emotion dysregulation when controlling for one's own emotion dysregulation ($p < .01$; Table 5). The interaction between one's own emotion dysregulation and perception of partner's emotion dysregulation was not found to be significant. In short, level of emotional intimacy post-interaction was predicted by emotion dysregulation differently for the speaker and the listener and differently in the low and high threat conditions.

These same analyses were also run in the low and high threat conditions while controlling for baseline, emotional intimacy, and results can be found in Table 6. One's own emotion dysregulation, perception of partner's emotion dysregulation, and the interaction between the two were no longer significant when controlling for enduring, baseline emotional intimacy in the low threat condition. However, even when controlling for enduring, baseline emotional intimacy in the high threat condition, perception of partner's emotion dysregulation continued to be predictive of the listener's

post-interaction intimacy, indicating that the listener's intimacy in the high threat condition is affected by how they perceive their partner's ability to regulate emotions.

Hypothesized Model 3

The third hypothesis states that the overall level of emotion dysregulation moderates the relation between self-disclosure, empathic responding, and resulting post-interaction intimacy. This hypothesis was tested separately for the speaker and listener, in both the low and high threat conditions, while controlling for pre-existing, baseline emotional intimacy. Zero-order correlations among all the measures in these analyses can be found in Tables 7 and 8. The following Level 1 equations were used:

$$\text{Speaker post-interaction intimacy} = \beta_{0ij} + \beta_1(\text{PAIR}) + \beta_2(\text{self-disclosure})_{ij} + \beta_3(\text{perception of partner's empathic responding})_{ij} + \beta_4(\text{perception of partner's emotion dysregulation})_{ij} + \beta_5(\text{self-disclosure} \times \text{perception of partner's empathic responding})_{ij} + \beta_6(\text{self-disclosure} \times \text{perception of partner's emotion dysregulation})_{ij} + \beta_7(\text{perception of partner's empathic responding} \times \text{perception of partner's emotion dysregulation})_{ij} + \beta_8(\text{self-disclosure} \times \text{perception of partner's empathic responding} \times \text{perception of partner's emotion dysregulation})_{ij}$$

and

$$\text{Listener post-interaction intimacy} = \beta_{0ij} + \beta_1(\text{PAIR}) + \beta_2(\text{self-disclosure})_{ij} + \beta_3(\text{perception of partner's empathic responding})_{ij} + \beta_4(\text{perception of partner's emotion dysregulation})_{ij} + \beta_5(\text{self-disclosure} \times \text{perception of partner's empathic responding})_{ij} + \beta_6(\text{self-disclosure} \times \text{perception of partner's emotion dysregulation})_{ij} + \beta_7(\text{perception of partner's empathic responding} \times \text{perception of}$$

partner's emotion dysregulation)$_{ij}$ + β_8(self-disclosure × perception of partner's empathic responding × perception of partner's emotion dysregulation)$_{ij}$.

Speaker's Post-Interaction Intimacy. In the low threat condition, the main effects of speaker's self-disclosure and speaker's perception of listener's empathic responding were both predictive of the speaker's post-interaction intimacy while controlling for pre-existing, baseline emotional intimacy (both at $p < .01$; Table 9). Unlike above, after controlling for empathic responding and self-disclosure, the main effect of perception of partner's emotion dysregulation was not predictive of speaker's post-interaction intimacy. None of the two-way interactions, nor the three-way interaction, was found to be significant. In the high threat condition, the main effect of perception of listener's empathic responding was predictive of speaker's post-interaction intimacy, while controlling for baseline emotional intimacy ($p < .01$; Table 9). The main effects of speaker's self-disclosure and perception of partner's emotion dysregulation were not predictive of speaker's post-interaction intimacy in the high threat condition, nor were any of the two-way interactions. The three-way interaction of speaker's self-disclosure, speaker's perception of empathic responding, and perception of partner's emotion dysregulation was found to be significant in the high threat condition ($p < .01$; Table 9; Figure 1). Specifically, as the speaker's level of self-disclosure increased, his or her own report of intimacy increased, except when it was perceived that the partner was high on empathic responding and low on emotion dysregulation, in which case the level of intimacy actually decreased. Speaker's level of post-interaction intimacy in the high threat condition was consistently lower when there was a perception that the partner

did not respond empathically, regardless of the partner's ability to regulate his or her emotional response. When it was perceived that the partner responded with higher levels of empathy, the speaker's reported level of post-interaction intimacy was higher compared to low levels of empathy, but the relationship between empathy and intimacy was positive when it was perceived that the partner was high on emotion dysregulation, and it was negative when it was perceived that the partner was low on emotion dysregulation.

Listener's Post-Interaction Intimacy. For the listener's post-interaction intimacy in the low threat condition, the main effects of listener's perception of speaker's self-disclosure and listener's perception of their own empathic responding, were both significant predictors of the listener's post-interaction intimacy, while controlling for baseline emotional intimacy (both at $p < .01$; Table 10). The main effect of listener's perception of their partner's emotion dysregulation was not found to be significant. The two-way interaction between listener's perception of their own empathic responding and perception of partner's emotion dysregulation was found to be significant ($p < .05$; Table 10; Figure 2). Specifically, this interaction indicated that as the listener's perception of his or her own empathic responding increased, the listener's reported post-interaction intimacy increased, but at different rates depending on perception of the partner's emotion dysregulation. When it was perceived that the partner was high on emotion dysregulation, or typically less emotionally regulated, intimacy became higher at a quicker rate as the partner responded more empathically, when compared to the case where the speaker is not typically perceived to have problems regulating his or her

emotions. No other two-way interactions, nor the three-way interaction, were significant. In the high threat condition, the listener's perception of their own empathic responding was predictive of their own post-interaction intimacy, while controlling for pre-existing emotional intimacy ($p < .01$; Table 10). The main effects of the listener's perception of speaker's self-disclosure and perception of their partner's emotion dysregluation, were not predictive of the listener's post-interaction intimacy in the high threat condition. The two-way interaction between listener's perception of their own empathic responding and the listener's perception of their partner's emotion dysregulation was found to be significant ($p < .01$; Table 10; Figure 3). As in the low threat condition, the listener's post-interaction intimacy increased as the listener perceived his or her own empathic responding to increase, but the rates varied by level of perception of the partner's emotion dysregulation. More specifically, when the listener perceived his or her partner to generally have more difficulty regulating emotions, intimacy increased at a quicker rate as the listener increased his or her own empathic responding, particularly when in comparison to speakers who were generally well regulated emotionally. No other two-way interactions, nor the three-way interaction, were found to be significant predictors of the listener's post-interaction intimacy in the high threat condition.

CONCLUSIONS

A growing body of research findings supports an interpersonal process model of intimacy in couples, as posited initially by Reis and Shaver (1988). This model asserts that when one partner discloses something vulnerable, and the partner responds empathically, then an experience of emotional intimacy is fostered. The present study extends this previous work by indicating that such processes of intimacy can also be influenced by emotion dysregulation. Emotion dysregulation has been discussed theoretically in the literature for quite some time, with empirical studies originating in developmental psychology (Gaensbauer, 1982; as cited in Gross, 1998). Studies on the construct are now emerging in the child and adult literatures, but empirical studies and measures to assess the construct are limited, particularly as emotion dysregulation relates to couple relationships. When measuring how enduring, baseline emotional intimacy is affected by emotion dysregulation, results indicated that both partners' ability to regulate emotion influences the experience of emotional intimacy, when controlling for the other. This supports the first hypothesis that higher levels of emotion dysregulation predict lower levels of enduring, baseline emotional intimacy, as measured by the PAIR. It is important to note that this conclusion simply addresses the influence of one's sense of the partner's enduring emotion dysregulation on enduring emotional intimacy and does not specifically address the process model of intimacy that is discussed below.

When measuring how emotion dysregulation affects post-interaction intimacy within this study, results varied based on whose intimacy was being measured (speaker or listener) and based on the condition (low or high threat). Specifically, the speaker's

post-interaction intimacy was predicted by perception of the partner's emotion dysregulation, while controlling for his or her own emotion dysregulation, only in the low threat condition. When baseline emotional intimacy was controlled, perception of the partner's emotion dysregulation was no longer predictive of the speaker's post-interaction intimacy. Their own emotion dysregulation was not a significant predictor when controlling for partner's emotion dysregulation in the low threat condition. In the high threat condition, the speaker's post-interaction intimacy was predicted by his or her own emotion dysregulation, when controlling for partner's emotion dysregulation. However, one's own emotion dysregulation did not continue to be predictive of the speaker's post-interaction intimacy when controlling for baseline emotional intimacy. Perception of the partner's emotion dysregulation did not predict the speaker's post-interaction intimacy in the high threat condition, when controlling for the speaker's own emotion dysregulation. When measuring the listener's post-interaction intimacy in the low threat condition, results suggested that again, intimacy was predicted by perception of partner's emotion dysregulation, when controlling for one's own emotion dysregulation. Again, this did not continue to be significant when controlling for baseline, emotional intimacy. The listener's own emotion dysregulation did not predict the listener's post-interaction intimacy, when controlling for the partner's emotion dysregulation. Both his or her own emotion dysregulation and perception of the partner's emotion dysregulation were shown to predict the listener's post-interaction intimacy in the high threat condition, when controlling for the other variable. However, when controlling for baseline emotional intimacy, only the perception of the partner's

emotion dysregulation continued to be a significant predictor of the listener's post-interaction intimacy in the high threat condition. These findings support the second hypothesis that higher levels of emotion dysregulation predict lower levels of intimacy post-interaction, and the findings further clarify the nature of the influence that emotion dysregulation has on post-interaction intimacy. It is curious that in the low threat conditions for both speakers and listeners, intimacy was predicted by perception of partner's emotion dysregulation, when controlling for own emotion dysregulation, and not by one's own emotion dysregulation, when controlling for partner's emotion dysregulation. A possible explanation is that when partners are discussing a time that someone other than the partner hurt their feelings, which is perceived as less threatening to the relationship, they are less influenced by their own emotion dysregulation and instead become more focused on their partner's emotion dysregulation. In contrast, when they are discussing a time that their partner hurt their feelings, which is perceived as a higher threat situation, the actual content of the discussion and their own emotional response overrides the effect of the partner's emotion dysregulation. This may be particularly true of the speaker's intimacy because the speaker was the one choosing the emotionally charged topic. Both their own emotion dysregulation and perception of their partner's emotion dysregulation, when controlling for the other, may have influenced the listener's emotional intimacy because the listener was not in control of the topic being discussed and was thereby more likely influenced by both their own and their partner's emotion dysregulation.

It is important to note that the only finding in this hypothesis that remained significant was that perception of partner's emotion dysregulation predicted the listener's post-interaction intimacy when controlling for baseline emotional intimacy. This indicates that when all other variables are taken into account, the listener's intimacy is influenced by perception of the partner's ability to regulation emotions. This may be particularly true because the listener has no control over the topic of discussion in this condition and the listener may be relying on the partner to be regulated during the interaction.

In regard to the third hypothesis, when controlling for level of self-disclosure and level of partner's empathic responding, emotion dysregulation as a main effect did not continue to be predictive of emotional intimacy in any of the conditions. However, there was still evidence for the hypothesis that emotion dysregulation moderates the relation between self-disclosure, empathic responding, and emotional intimacy, in at least some of the conditions (see Baron & Kenny, 1986; Whisman & McClelland, 2005). Specifically, empathic responding and emotion dysregulation as an interaction term was predictive of the listener's post-interaction intimacy in both the low and high threat conditions, although this same pattern was not seen in relation to the speaker's post-interaction intimacy. The fact that the listener does not get to choose the topic of discussion may partially explain why their own intimacy is predicted by a combination of their own empathic responding and perception of partner's emotion dysregulation. It may also be that a single interaction, viewed as an opportunity to promote intimacy, simply does not have as strong an effect on intimacy when the partner is typically more

stable emotionally, and possibly more predictable. However, when it is perceived that a partner (in this case the speaker) is generally poorly regulated emotionally, the potential for intimacy in the listener is increased, particularly when the listener is able to respond empathically in the midst of the generally less favorable condition of a poorly regulated partner.

Also of importance is that the speaker's post-interaction intimacy in the high threat condition was predicted by a three-way interaction term including self-disclosure, empathic responding, and emotion dysregulation. Again, as the speaker's level of self-disclosure increased, his or her own report of intimacy increased, except when it was perceived that the partner was high on empathic responding and low on emotion dysregulation, in which case the level of intimacy actually decreased. Speaker's level of post-interaction intimacy in the high threat condition was consistently lower when there was a perception that the partner did not respond empathically, regardless of the partner's ability to regulate his or her emotional response. When it was perceived that the partner responded with higher levels of empathy, the speaker's reported level of post-interaction intimacy was higher compared to low levels of empathy, but the relationship was positive when it was perceived that the partner was high on emotion dysregulation, and the relationship was negative when it was perceived that the partner was low on emotion dysregulation. These conclusions support the idea that emotion dysregulation is a moderator of intimacy as a process involving self-disclosure and empathic responding. The only case where speaker's post-interaction intimacy actually decreased as the speaker's level of self-disclosure increased was when the speaker

perceived high levels of empathic responding from the partner who was also low on emotion dysregulation. It is possible that even in the midst of an empathic responder who is emotionally well regulated, the speaker's own emotion dysregulation and the content of the topic of discussion regarding the relationship threatened the vulnerable partner's ability to experience intimacy for the moment. This idea is consistent with what was found for the speaker's post-interaction intimacy in the high threat condition, when addressing one's own emotion dysregulation and perception of partner's emotion dysregulation, in the absence of controlling for self-disclosure and empathic responding.

The examination of emotion dysregulation as a moderator of the interpersonal process model of intimacy adds a unique contribution to the current body of literature. The importance of emotion dysregulation in couple relationships is receiving increased attention in the literature and some forms of therapy have been specifically designed to target changing couples' emotional systems and the negative interactional cycles in which couples engage (Goldman & Greenberg, 2006). Emotionally focused couples therapy (Greenberg & Johnson, 1988; Johnson, 2004; Greenberg & Goldman, 2008) is one such type of treatment.

What the results of this study suggest in terms of clinical implications is that targeting emotion regulation in the absence of teaching couples to speak effectively and respond empathically is not enough. These results also raise the issue of enduring emotion dysregulation style (individual differences across people) versus cross-situational emotion dysregulation response (inter- or cross-situational differences for any given person). Part of how the partners are interacting could be based on the history of

how they regard one another's emotion regulation style in general, even if the partner is using more (or less) adaptive emotion regulation skills in an individual interaction or particular moment. This idea is similar to that of "sentiment override" posited by Weiss (1980). Interventions should target coaching couples to respond to the partner in the moment rather than responding based on one's preconceived assumptions of how the partner will respond. This would involve utilizing basic communication skills of speaking in a manner so others can hear, actively listening and reflecting, and responding empathically during each individual interaction. Coupled with emotion regulation strategies, over time, this could serve to improve each partner's perception of the other's capacity to regulate emotions generally and in any particular situation.

Both a potential strength and limitation of the study is the design of the interactions or discussions. One strength is that the study's design is highly consistent with Reis and Shaver's (1988) theory that is being tested, even more so than similar studies testing the same theory (i.e. Laurenceau, Barrett, & Pietromonaco, 1998 and Laurenceau, Barrett, & Rovine, 2005). The design asks partners to rate specific interactions, directly following the interaction. This helps minimize the risk of obtaining a more global rating and increases the likelihood that the partners will provide ratings based on the interaction at hand. Additionally, the study design allows for examining information from both partners' perspectives and accounts for the contingencies between partners' responses by having each partner rate him/herself and the partner following each interaction. Another possible strength of the design is that each partner chose his or her own topic, thus ensuring the topic was realistic for the couple. It may also have

increased the opportunity for experiencing intimacy, as well as increased the possibility of eliciting emotion dysregulation in the interaction. While possibly a strength, Marston et al. (1998) suggests that a method such as this may yield the subjective recall of situations that are emotionally intense and rare (as cited in Lippert & Prager, 2001). This could mean that conclusions may be drawn based on anomalies in the relationship and not on the general, daily experiences of the couple (the exception rather than the rule).

Limitations of the current study include questions about issues of statistical power. Whisman and McClelland (2005) report that failure to find hypothesized interactions in family research, in many cases, is due to low sample size and resulting insufficient power. This was a concern in the current study and was compounded by research interests in the interaction terms, which are more difficult to detect when there are multiple predictors and low power. Another limitation is that the design that measures baseline emotional intimacy is non-experimental and correlational in nature, meaning that causal statements cannot be made. It is possible that the results we find are because intimacy influences emotion dysregulation, as opposed to the direction hypothesized here. Additionally, there may be other variables that contribute significantly to intimacy that are unaccounted for here.

In terms of theoretical limitations, the design of the study limited a partner from easily utilizing the first of the antecedent-focused strategies of emotion regulation discussed by Gross, Richards, and John (2006). By nature of the study design, the listening partner did not get to choose the topic and therefore could not engage in

"situation selection" as a strategy to avoid something that might trigger a strong emotional response. Additionally, at the time of the study design and data collection, only one measure of emotion dysregulation was available. While this in not necessarily a limitation in and of itself, further research on the reliability and validity of the measure in full form and on our adaptation of it in assessing emotion dysregulation is warranted. Perhaps a measure that teases out the overcontrol and undercontrol of emotion regulation would add a significant contribution to this study and to the literature, as these two issues present quite different clinical pictures with different treatment approaches (Goldman & Greenberg, 2006). Another potential limitation is that the other measures used in this study were adaptations from established measures, so again, psychometric properties such as reliability and validity in a variety of settings are unknown.

In addition to the strengths mentioned in the study design, one statistical strength of the current study is the use of multilevel modeling to address the violation of the assumption of independent observations, which is inherently violated in dyadic data analysis. Additionally, an experimental design was utilized in part of the study to determine how each partner's emotion dysregulation predicts post-interaction intimacy and to determine how self-disclosure, empathic responding, and emotion dysregulation predict post-interaction intimacy, with threat condition being the manipulated variable in each of these questions. Compared to similar studies of couple relationships, this study used a large sample of community couples in committed relationships and was not a convenience sample of college students. This improves the generalizability of the results to the general population. Yet another strength is that the study was able to examine

each partner's experience of intimacy (as speaker and listener) directly following the interactions, while also controlling for enduring, baseline levels of emotional intimacy.

Results of the current study provide information regarding the influence of emotion dysregulation on the interpersonal process model of intimacy posited by Reis and Shaver (1988) and also build on previous findings that support this interpersonal process model of intimacy. In the future, it would be important for research to further investigate the importance of emotion dysregulation as a moderator in couples' experience of intimacy and to replicate these findings. Comparisons of community and clinic couples would provide useful information about the process of intimacy across varying levels of couple distress, dissatisfaction, and emotion dysregulation. Observational research specifically addressing the correspondence between self-report, partner-report, and observer ratings of emotion dysregulation would be an important contribution to the literature. Additionally, making a distinction between hard emotion, soft emotion, and flat emotion (Sanford, 2007) may shed further light on emotion dysregulation and the mechanisms driving its influence on intimacy.

Goldman and Greenberg (2006) distinguish between primary and secondary emotions in response to a trigger, yielding important distinctions in treatment of relationship issues. They define primary emotions as one's most fundamental and initial reaction to a situation, and these emotions can be adaptive and productive, or maladaptive and resistant to change. Secondary emotions, they note, may be defenses against more primary internal responses and are reactions to responses to a trigger rather that the response to the trigger itself. Empirical studies addressing this distinction would

be a significant contribution to the literature and to the treatment of couples in distress. It might also be important to investigate the interpersonal process model of intimacy specifically in interactions that are designed to probe for situations that do not involve hurt feelings or conflict. Research endeavors such as these would further advance our understanding of factors that strengthen and compromise the experience of emotional intimacy in couple relationships.

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APPENDIX A

Relationship Items of the Marital Satisfaction Inventory-Revised
Global distress scale, the Disaffection scale, and Disharmony scale

***Please indicate whether the following questions about your CURRENT relationship are TRUE or FALSE*:**	True	False
1. Our relationship has been very satisfying.	O	O
2. I have often considered asking my partner to go with me for relationship counseling.	O	O
3. My partner and I seldom have major disagreements.	O	O
4. I have never felt better in our relationship than I do now.	O	O
5. I have important needs in our relationship that are not being met.	O	O
6. My partner's feelings are too easily hurt.	O	O
7. Our arguments frequently end with one of us feeling hurt or crying.	O	O
8. I have known very little unhappiness in our relationship.	O	O
9. My partner likes to share his/her leisure time with me.	O	O
10. There are many things about our relationship that please me.	O	O
11. Two people should be able to get along better than my partner and I do.	O	O
12. Our relationship has been disappointing in several ways.	O	O
13. The future of our relationship is too uncertain for us to make any serious plans.	O	O
14. I might be happier if I weren't in this relationship.	O	O
15. I believe that our relationship is as pleasant as that of most of the people I know.	O	O
16. There is a great deal of love and affection expressed in our relationship.	O	O
17. At times I have very much wanted to leave my partner.	O	O
18. Even when I am with my partner, I feel lonely much of the time.	O	O
19. My partner and I don't have much in common to talk about.	O	O
20. The good things in our relationship far outweigh the bad.	O	O
21. My partner and I have never come close to ending our relationship.	O	O
22. There are some serious difficulties in our relationship.	O	O
23. My partner doesn't take me seriously enough sometimes.	O	O
24. When we argue, my partner and I often seem to go over and over the same old things.	O	O
25. My partner has no difficulty accepting criticism.	O	O
26. When arguing, we manage quite well to restrict our focus to the important issues.	O	O

***Please indicate whether the following questions about your CURRENT relationship are TRUE or FALSE*:**	True	False
27. Our relationship is as successful as any that I know of.	O	O
28. I get pretty discouraged about our relationship sometimes.	O	O
29. My partner does many things to show me that he or she loves me.	O	O
30. My partner and I are happier than most of the couples I know.	O	O
31. I have often wondered whether our relationship may end in separation or divorce.	O	O
32. I believe our relationship is reasonably happy.	O	O
33. Sometimes my partner just can't understand the way I feel.	O	O
34. My partner and I need to improve the way we settle our differences.	O	O
35. My partner sometimes seems intent upon changing some aspect of my personality.	O	O
36. My partner often fails to understand my point of view on things.	O	O

NOTE: Items in bold and italics reflect those on the Global Distress Scale of the Marital Satisfaction Inventory—Revised.

Emotional Intimacy subscale of the Personal Assessment of Intimacy in Relationships (PAIR)

Please read each item and indicate how you typically feel toward your current partner. Keep in mind that there are no right or wrong answers. Use the 5-point scale provided below to answer each item.

Please respond to the following items in terms of *how you presently feel* in your current relationship:	I strongly disagree				I strongly agree
1. I often feel distant from my partner.	O	O	O	O	O
2. I sometimes feel lonely when we're together.	O	O	O	O	O
3. My partner listens to me when I need someone to talk to.	O	O	O	O	O
4. I can state my feelings without my partner getting defensive.	O	O	O	O	O
5. My partner can really understand my hurts and joys.	O	O	O	O	O
6. I feel neglected at times by my partner.	O	O	O	O	O

Difficulties in Emotion Regulation Scale

For each of the following statements, indicate how often that statement applies to you by filling in the circle under the appropriate column from “Almost Never” to “Almost Always.”

	Almost Never (0-10% of the time)	Sometimes (11-35% of the time)	About Half the Time (36-65% of the time)	Most of the Time (66-90% of the time)	Almost Always (91-100% of the time)
1. I am clear about my feelings	❍	❍	❍	❍	❍
2. I pay attention to how I feel	❍	❍	❍	❍	❍
3. I experience my emotions as overwhelming and out of control	❍	❍	❍	❍	❍
4. I have no idea how I am feeling	❍	❍	❍	❍	❍
5. I have difficulty making sense out of my feelings	❍	❍	❍	❍	❍
6. I am attentive to my feelings	❍	❍	❍	❍	❍
7. I know exactly how I am feeling	❍	❍	❍	❍	❍
8. I care about what I am feeling	❍	❍	❍	❍	❍
9. I am confused about how I feel	❍	❍	❍	❍	❍
10. When I’m upset, I acknowledge my emotions	❍	❍	❍	❍	❍
11. When I’m upset, I become angry with myself for feeling that way	❍	❍	❍	❍	❍
12. When I’m upset, I become embarrassed for feeling that way	❍	❍	❍	❍	❍
13. When I’m upset, I have difficulty getting work done	❍	❍	❍	❍	❍
14. When I’m upset, I become out of control	❍	❍	❍	❍	❍
15. When I’m upset, I believe that I will remain that way for a long time	❍	❍	❍	❍	❍
16. When I’m upset, I believe that I’ll end up	❍	❍	❍	❍	❍

	Almost Never (0-10% of the time)	Sometimes (11-35% of the time)	About Half the Time (36-65% of the time)	Most of the Time (66-90% of the time)	Almost Always (91-100% of the time)
feeling very depressed					
17. When I'm upset, I believe that my feelings are valid and important	❍	❍	❍	❍	❍
18. When I'm upset, I have difficulty focusing on other things	❍	❍	❍	❍	❍
19. When I'm upset, I feel out of control	❍	❍	❍	❍	❍
20. When I'm upset, I can still get things done	❍	❍	❍	❍	❍
21. When I'm upset, I feel ashamed with myself for feeling that way	❍	❍	❍	❍	❍
22. When I'm upset, I know that I can find a way to eventually feel better	❍	❍	❍	❍	❍
23. When I'm upset, I feel like I am weak	❍	❍	❍	❍	❍
24. When I'm upset, I feel like I can remain in control of my behaviors	❍	❍	❍	❍	❍
25. When I'm upset, I feel guilty for feeling that way	❍	❍	❍	❍	❍
26. When I'm upset, I have difficultly concentrating	❍	❍	❍	❍	❍
27. When I'm upset, I have difficulty controlling my behaviors	❍	❍	❍	❍	❍
28. When I'm upset, I believe that there is nothing I can do to make myself feel better	❍	❍	❍	❍	❍
29. When I'm upset, I become irritated with myself for feeling that way	❍	❍	❍	❍	❍
30. When I'm upset, I start to feel very bad about myself	❍	❍	❍	❍	❍
31. When I'm upset, I believe that wallowing in it is all I can do	❍	❍	❍	❍	❍

	Almost Never (0-10% of the time)	Sometimes (11-35% of the time)	About Half the Time (36-65% of the time)	Most of the Time (66-90% of the time)	Almost Always (91-100% of the time)
32. When I'm upset, I lose control over my behaviors	❍	❍	❍	❍	❍
33. When I'm upset, I have difficulty thinking about anyone else	❍	❍	❍	❍	❍
34. When I'm upset, I take time to figure out what I'm really feeling	❍	❍	❍	❍	❍
35. When I'm upset, it takes me a long time to feel better	❍	❍	❍	❍	❍
36. When I'm upset, my emotions feel overwhelming	❍	❍	❍	❍	❍

NOTE: Items in bold reflect those on the following three subscales of the Difficulties in Emotion Regulation Scale which were utilized in this study: Difficulties Engaging in Goal-Directed Behavior, Impulse Control Difficulties, and Limited Access to Emotion Regulation Strategies.

Difficulties in Emotion Regulation Scale-Partner Version

WOMEN ANSWER: TOP HALF

For each of the following statements, indicate how often that statement applies to you by filling in the circle under the appropriate column from "Almost Never" to "Almost Always."

	Almost Never (0-10% of the time)	Sometimes (11-35% of the time)	About Half the Time (36-65% of the time)	Most of the Time (66-90% of the time)	Almost Always (91-100% of the time)
1. When my partner is upset, he loses control over his behaviors	❍	❍	❍	❍	❍
2. When my partner is upset, he has difficulty controlling his behaviors	❍	❍	❍	❍	❍
3. When my partner is upset, he becomes out of control	❍	❍	❍	❍	❍
4. When my partner is upset, he appears overwhelmed by his emotions	❍	❍	❍	❍	❍
5. Once my partner is upset, he remains that way for a long time	❍	❍	❍	❍	❍
6. Once my partner is upset, he tends to wallow in his emotions	❍	❍	❍	❍	❍
7. Once my partner is upset, it takes him a long time to feel better	❍	❍	❍	❍	❍
8. Once my partner is upset, he soon finds a way to get over it	❍	❍	❍	❍	❍

MEN ANSWER: BOTTOM HALF

For each of the following statements, indicate how often that statement applies to you by filling in the circle under the appropriate column from "Almost Never" to "Almost Always."

	Almost Never (0-10% of the time)	Sometimes (11-35% of the time)	About Half the Time (36-65% of the time)	Most of the Time (66-90% of the time)	Almost Always (91-100% of the time)
1. When my partner is upset, she loses control over her behaviors	❍	❍	❍	❍	❍
2. When my partner is upset, she has difficulty controlling her behaviors	❍	❍	❍	❍	❍
3. When my partner is upset, she becomes out of control	❍	❍	❍	❍	❍
4. When my partner is upset, she appears overwhelmed by her emotions	❍	❍	❍	❍	❍
5. Once my partner is upset, she remains that way for a long time	❍	❍	❍	❍	❍
6. Once my partner is upset, she tends to wallow in her emotions	❍	❍	❍	❍	❍
7. Once my partner is upset, it takes her a long time to feel better	❍	❍	❍	❍	❍
8. Once my partner is upset, she soon finds a way to get over it	❍	❍	❍	❍	❍

Measure of Hurt Feelings – "Hurt By Other"

Please think of a time when your feelings were hurt by someone other than your partner (also not by someone closely associated with your partner – such as your partner's best friend or family member). Rate your level of hurt feelings on a scale from 1 to 10, indicating the degree to which your feelings were hurt and the significance of the situation for you. Please choose a topic that you rate as a 5, 6, or 7. Next, write a paragraph about the incident, particularly noting the emotion you experienced during the incident.

1	2	**3**	4	**5**	6	**7**	8	9	**10**
feelings were not hurt at all .		**feelings were hurt some, but I got over it pretty quick**		**feelings were hurt moderately**		**feelings were hurt considerably, I was very upset**			**feelings were hurt extensively, I am still hurt**

Measure of Hurt Feelings – "Hurt By Partner"

Please think of a time when your feelings were hurt by your partner. Rate your level of hurt feelings on a scale from 1 to 10, indicating the degree to which your feelings were hurt and the significance of the situation for you. Please choose a topic that you rate as a 5, 6, or 7. Next, write a paragraph about the incident, particularly noting the emotion you experienced during the incident.

1	2	**3**	4	**5**	6	**7**	8	9	**10**
feelings were not hurt at all .		**feelings were hurt some, but I got over it pretty quick**		**feelings were hurt moderately**		**feelings were hurt considerably, I was very upset**			**feelings were hurt extensively, I am still hurt**

Measure of Intimate Events – Speaker/Discloser Version

***Please indicate how true the following statements are, SPECIFIC TO THIS INTERACTION*:**	Not at all true	Not very true	Moderately true	Very true
1. I told my partner about my feelings or emotions. **(SD)**	O	O	O	O
2. My partner listened attentively during this interaction. **(EMP)**	O	O	O	O
3. The interaction felt pleasant. **(INT)**	O	O	O	O
4. I shared something personal or private during this interaction. **(SD)**	O	O	O	O
5. I feel closer to my partner following this interaction. **(INT)**	O	O	O	O
6. I was critical of my partner.**	O	O	O	O
7. I felt safe and comfortable opening up to my partner. **(SD)**	O	O	O	O
8. I feel more distant to my partner following this interaction. **(INT)**	O	O	O	O
9. My partner expressed positive feelings toward me. **(EMP)**	O	O	O	O
10. During the interaction, I felt anxious, like I was walking on eggshells. **(INT)**	O	O	O	O
11. We quarreled during this interaction. **(INT)**	O	O	O	O
12. I expressed a need, wish, or want. **(SD)**	O	O	O	O
13. My partner was supportive and caring during the interaction. **(EMP)**	O	O	O	O
14. This interaction felt intimate. **(INT)**	O	O	O	O
15. My partner understood me. **(EMP)**	O	O	O	O
16. My partner was critical of me. **(EMP)**	O	O	O	O
17. It was difficult for me to open up to my partner. **(SD)**	O	O	O	O

NOTE: SD = Self-Disclosure, EMP = Empathic Responding, and INT = Intimacy.

**Item was excluded in final analyses.

Measure of Intimate Events – Listener/Responder Version

***Please indicate how true the following statements are, SPECIFIC TO THIS INTERACTION*:**	Not at all true	Not very true	Moderately true	Very true
1. My partner told me about his/her feelings or emotions. **(SD)**	O	O	O	O
2. I listened attentively during this interaction. **(EMP)**	O	O	O	O
3. The interaction felt pleasant. **(INT)**	O	O	O	O
4. My partner shared something personal or private during this interaction. **(SD)**	O	O	O	O
5. I feel closer to my partner following this interaction. **(INT)**	O	O	O	O
6. I was critical of my partner. **(EMP)**	O	O	O	O
7. My partner felt comfortable revealing his/her hurt feelings to me. **(SD)**	O	O	O	O
8. I feel more distant to my partner following this interaction. **(INT)**	O	O	O	O
9. I expressed positive feelings toward my partner. **(EMP)**	O	O	O	O
10. During the interaction, I felt anxious, like I was walking on eggshells. **(INT)**	O	O	O	O
11. We quarreled during this interaction. **(INT)**	O	O	O	O
12. My partner expressed a need, wish, or want. **(SD)**	O	O	O	O
13. I was supportive and caring during the interaction. **(INT)**	O	O	O	O
14. This interaction felt intimate. **(INT)**	O	O	O	O
15. I believe I understood my partner. **(EMP)**	O	O	O	O
16. My partner was critical of me.**	O	O	O	O
17. My partner shared his/her true feelings during the interaction. **(SD)**	O	O	O	O

NOTE: SD = Self-Disclosure, EMP = Empathic Responding, and INT = Intimacy.

**Item was excluded in final analyses.

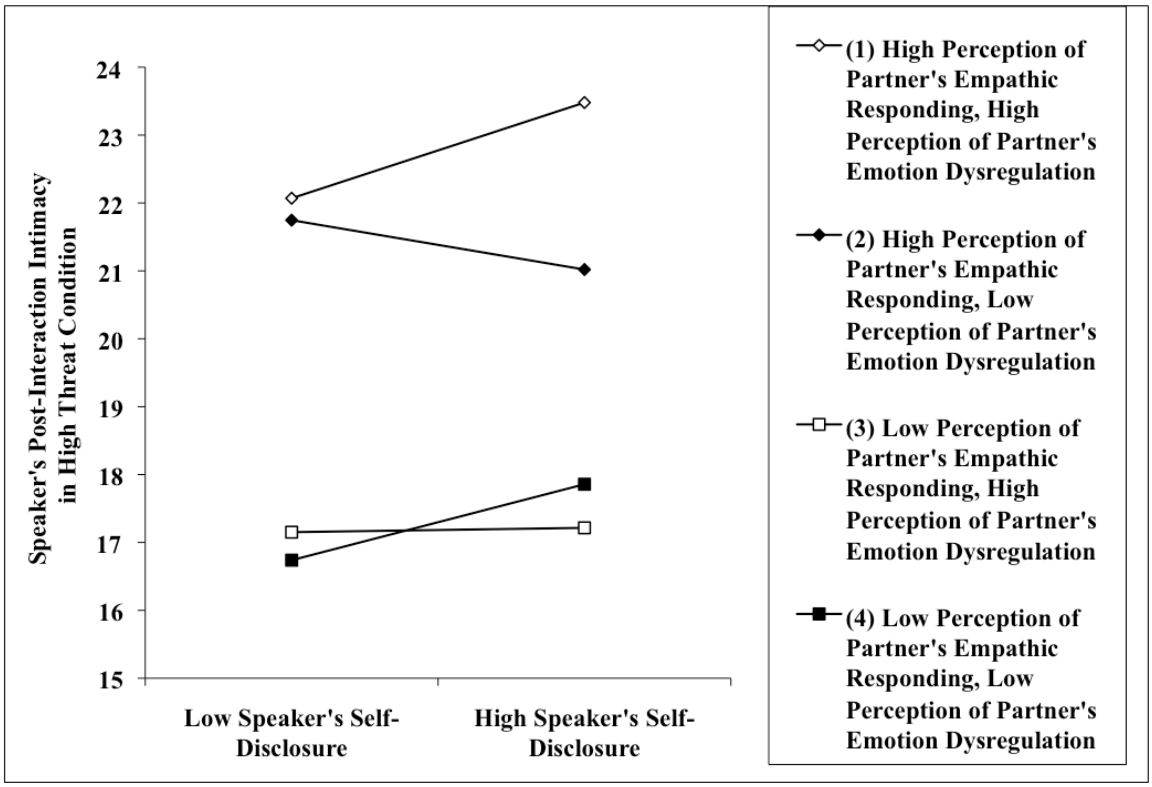

Figure 1

Interaction of Speaker's Self-Disclosure, Perception of Their Partner's Empathic Responding, and Perception of Their Partner's Emotion Dysregulation on Speaker's Post-Interaction Intimacy in the High Threat Condition

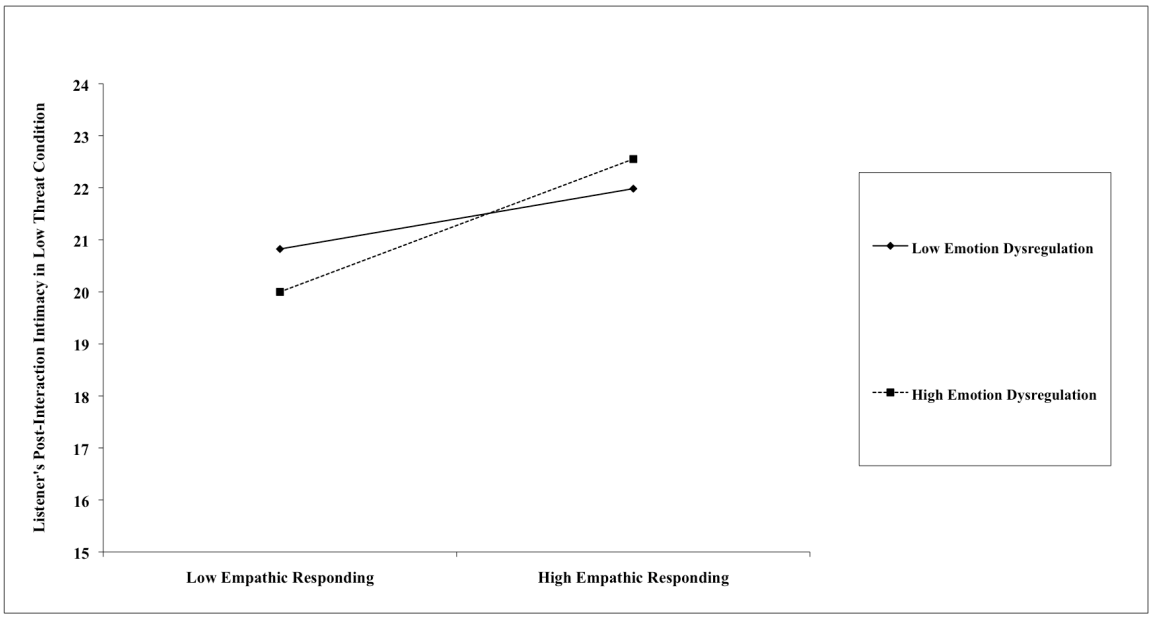

Figure 2

Interaction of Listener's Perception of Their Own Empathic Responding and Perception of Their Partner's Emotion Dysregulation on Listener's Post-Interaction Intimacy in the Low Threat Condition

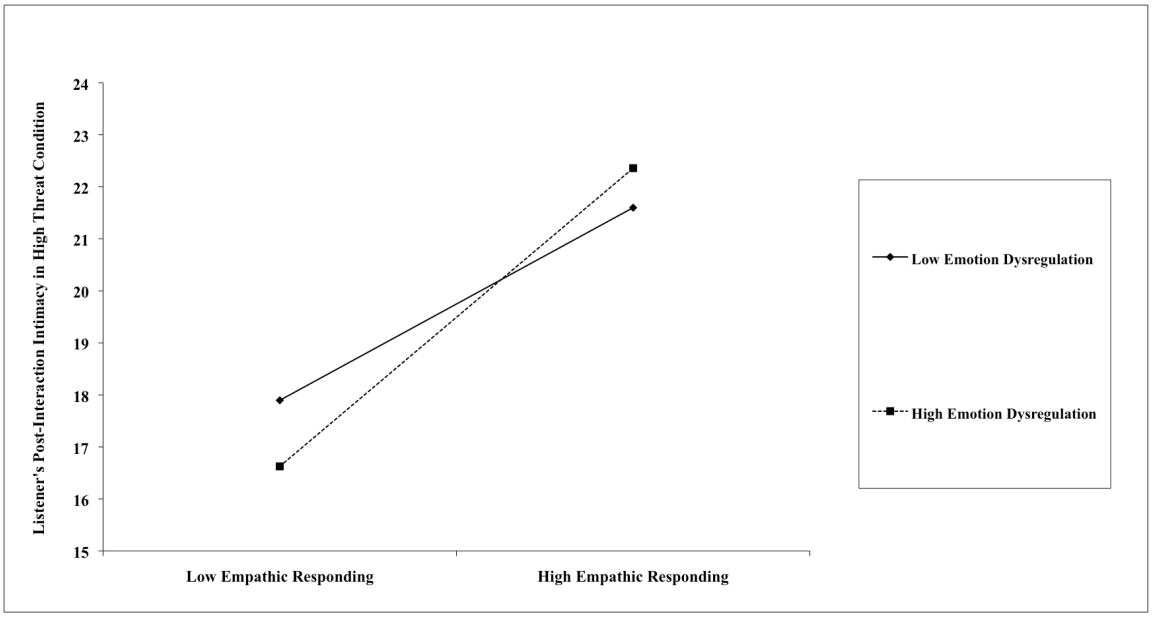

Figure 3

Interaction of Listener's Perception of Their Own Empathic Responding and Perception of Their Partner's Emotion Dysregulation on Listener's Post-Interaction Intimacy in the High Threat Condition

Table 1

Means and Standard Deviations for Speaker's and Listener's Predictor and Outcome Variables in Low and High Threat Conditions

Variable	Males		Females	
	M	*SD*	*M*	*SD*
Speaker				
Low Threat Condition				
Intimacy	20.65	2.41	21.40	2.00
Self-Disclosure	17.11	1.99	17.33	1.85
Perceived Empathy	18.56	1.96	18.69	1.82
High Threat Condition				
Intimacy	19.53	3.40	19.67	3.51
Self-Disclosure	17.07	2.14	17.82	2.04
Perceived Empathy	16.85	2.78	16.85	3.13
Listener				
Low Threat Condition				
Intimacy	20.75	2.54	21.69	2.07
Self-Disclosure	17.47	1.96	17.31	2.12
Perceived Empathy	18.13	1.91	18.43	1.71
High Threat Condition				
Intimacy	19.36	3.54	19.86	3.47
Self-Disclosure	17.77	1.74	17.48	2.14
Perceived Empathy	16.79	2.62	16.89	2.70

Table 2

Effect of Own Emotion Dysregulation and Partner Emotion Dysregulation on Enduring, Baseline Emotional Intimacy

Fixed Effect	*b*	*SE(b)*	*t*
Intercept	23.36**	0.31	74.29
Own Emotion Dysregulation	-0.14**	0.02	-6.35
Perception of Partner's Emotion Dysregulation	-0.18**	0.04	-4.30
Own Emotion Dysregulation × Perception of Partner's Emotion Dysregulation	-0.00	0.01	-0.39

**significant at p < .05; **significant at p < .01*

Table 3

Effect of Own Emotion Dysregulation and Partner Emotion Dysregulation on Speaker's Post-Interaction Intimacy

Fixed Effect	*b*	*SE(b)*	*t*
Low Threat Condition			
Intercept	21.03**	0.16	131.11
Own Emotion Dysregulation	-0.01	0.01	-1.03
Perception of Partner's Emotion Dysregulation	-0.07*	0.03	-2.23
Own Emotion Dysregulation × Perception of Partner's Emotion Dysregulation	-0.00	0.00	-0.86
High Threat Condition			
Intercept	19.60**	0.26	75.80
Own Emotion Dysregulation	-0.08**	0.02	-3.60
Perception of Partner's Emotion Dysregulation	-0.03	0.04	-0.80
Own Emotion Dysregulation × Perception of Partner's Emotion Dysregulation	-0.00	0.00	-0.64

**significant at $p < .05$; **significant at $p < .01$*

Table 4

Effect of Own Emotion Dysregulation and Partner Emotion Dysregulation on Speaker's Post-Interaction Intimacy While Controlling for Enduring, Baseline Emotional Intimacy

Fixed Effect	*b*	*SE(b)*	*t*
Low Threat Condition			
Intercept	21.04**	0.15	138.98
PAIR	0.16**	0.04	3.96
Own Emotion Dysregulation	0.01	0.02	0.40
Perception of Partner's Emotion Dysregulation	-0.03	0.03	-0.95
Own Emotion Dysregulation × Perception of Partner's Emotion Dysregulation	-0.00	0.00	-0.79
High Threat Condition			
Intercept	19.61**	0.23	86.73
PAIR	0.29**	0.06	5.18
Own Emotion Dysregulation	-0.04	0.02	-1.89
Perception of Partner's Emotion Dysregulation	0.02	0.04	0.52
Own Emotion Dysregulation × Perception of Partner's Emotion Dysregulation	-0.00	0.00	-0.37

**significant at $p < .05$; **significant at $p < .01$*

Table 5

Effect of Own Emotion Dysregulation and Partner Emotion Dysregulation on Listener's Post-Interaction Intimacy

Fixed Effect	*b*	*SE(b)*	*t*
Low Threat Condition			
Intercept	21.25**	0.16	131.75
Own Emotion Dysregulation	-0.02	0.02	-1.22
Perception of Partner's Emotion Dysregulation	-0.06**	0.02	-2.59
Own Emotion Dysregulation × Perception of Partner's Emotion Dysregulation	-0.00	0.00	-0.87
High Threat Condition			
Intercept	19.66**	0.27	73.20
Own Emotion Dysregulation	-0.06**	0.02	-2.94
Perception of Partner's Emotion Dysregulation	-0.14**	0.04	-3.19
Own Emotion Dysregulation × Perception of Partner's Emotion Dysregulation	-0.00	0.00	-1.15

**significant at $p < .05$; **significant at $p < .01$*

Table 6

Effect of Own Emotion Dysregulation and Partner Emotion Dysregulation on Listener's Post-Interaction Intimacy While Controlling for Enduring, Baseline Emotional Intimacy

Fixed Effect	*b*	*SE(b)*	*t*
Low Threat Condition			
Intercept	21.25**	0.15	139.11
PAIR	0.16**	0.04	4.27
O0wn Emotion Dysregulation	0.00	0.02	0.03
Perception of Partner's Emotion Dysregulation	-0.02	0.03	-0.90
Own Emotion Dysregulation × Perception of Partner's Emotion Dysregulation	-0.00	0.00	-0.72
High Threat Condition			
Intercept	19.66**	0.25	79.46
PAIR	0.23**	0.06	3.95
Own Emotion Dysregulation	-0.03	0.02	-1.41
Perception of Partner's Emotion Dysregulation	-0.09*	0.05	-1.98
Own Emotion Dysregulation × Perception of Partner's Emotion Dysregulation	-0.00	0.00	-1.14

**significant at p < .05; **significant at p < .01*

Table 7

Zero-Order Correlations for Speaker's Predictor and Outcome Variables in Low and High Threat Conditions

Variable	1	2	3	4	5	6
Low Threat Condition						
1. PAIR	--					
2. Post-Interaction Intimacy	0.36**	--				
3. Self-Disclosure	0.19**	0.46**	--			
4. Perceived Empathy	0.42**	0.56**	0.32**	--		
5. DERS	-0.36**	-0.10	-0.10	-0.07	--	
6. Partner's DERS	-0.42**	-0.22**	-0.16*	-0.21**	0.20**	--
High Threat Condition						
1. PAIR	--					
2. Post-Interaction Intimacy	0.46**	--				
3. Self-Disclosure	0.23**	0.33**	--			
4. Perceived Empathy	0.48**	0.76**	0.38**	--		
5. DERS	-0.36**	-0.26**	-0.03	-0.19**	--	
6. Partner's DERS	-0.42**	-0.16*	-0.15*	-0.28**	0.20**	--

**significant at p < .05; **significant at p < .01*

Table 8

Zero-Order Correlations for Listener's Predictor and Outcome Variables in Low and High Threat Conditions

Variable	1	2	3	4	5	6
Low Threat Condition						
1. PAIR	--					
2. Post-Interaction Intimacy	0.35**	--				
3. Perceived Self-Disclosure	0.21**	0.45**	--			
4. Empathy	0.28**	0.57**	0.45**	--		
5. DERS	-0.36**	-0.12	-0.12	-0.11	--	
6. Partner's DERS	-0.42**	-0.21**	-0.06	-0.20**	0.20**	--
High Threat Condition						
1. PAIR	--					
2. Post-Interaction Intimacy	0.45**	--				
3. Perceived Self-Disclosure	0.28**	0.38**	--			
4. Empathy	0.44**	0.76**	0.55**	--		
5. DERS	-0.36**	-0.24**	-0.14*	-0.17*	--	
6. Partner's DERS	-0.42**	-0.31**	-0.14*	-0.25**	0.20**	--

**significant at p < .05; **significant at p < .01*

Table 9

Effect of Self-Disclosure, Empathic Responding, and Emotion Dysregulation on Speaker's Post-Interaction Intimacy while Controlling for Pre-existing, Baseline Emotional Intimacy

Fixed Effect	*b*	*SE(b)*	*t*
Low Threat Condition			
Intercept	21.06**	0.11	184.60
PAIR	0.05	0.03	1.37
Speaker's Self-disclosure	0.35**	0.06	5.53
Perception of Partner's Empathic Responding	0.49**	0.08	6.29
Perception of Partner's Emotion Dysregulation	-0.01	0.02	-0.35
Self-disclosure × Empathic Responding	-0.01	0.03	-0.36
Self-disclosure × Emotion Dysregulation	0.01	0.01	1.31
Empathic Responding × Emotion Dysregulation	-0.00	0.01	-0.53
Self-disclosure × Empathic Responding × Emotion Dysregulation	-0.01	0.01	-1.23
High Threat Condition			
Intercept	19.66**	0.15	127.26
PAIR	0.14**	0.04	3.17
Speaker's Self-disclosure	0.11	0.08	1.42
Perception of Partner's Empathic Responding	0.82**	0.06	14.42

Table 9 (*continued*)

Fixed Effect	*b*	*SE(b)*	*t*
Perception of Partner's Emotion Dysregulation	0.05	0.03	1.67
Self-disclosure × Empathic Responding	-0.01	0.03	-0.27
Self-disclosure × Emotion Dysregulation	0.01	0.01	0.66
Empathic Responding × Emotion Dysregulation	0.02	0.01	1.35
Self-disclosure × Empathic Responding × Emotion Dysregulation	0.01**	0.00	3.16

**significant at p < .05; **significant at p < .01*

Table 10

Effect of Self-Disclosure, Empathic Responding, and Emotion Dysregulation on Listener's Post-Interaction Intimacy While Controlling for Pre-existing, Baseline Emotional Intimacy

Fixed Effect	*b*	*SE(b)*	*t*
Low Threat Condition			
Intercept	21.34**	0.14	156.24
PAIR	0.10**	0.03	2.94
Perception of Speaker's Self-disclosure	0.26**	0.08	3.24
Listener's Empathic Responding	0.51**	0.09	5.89
Perception of Partner's Emotion Dysregulation	-0.01	0.02	-0.66
Self-disclosure × Empathic Responding	-0.02	0.03	-0.61
Self-disclosure × Emotion Dysregulation	0.00	0.01	0.06
Empathic Responding × Emotion Dysregulation	0.03**	0.01	2.03
Self-disclosure × Empathic Responding × Emotion Dysregulation	0.00	0.00	0.33
High Threat Condition			
Intercept	19.62**	0.19	103.65
PAIR	0.07*	0.03	2.20
Perception of Speaker's Self-disclosure	-0.01	0.10	-0.05
Listener's Empathic Responding	0.89**	0.07	12.15

Table 10 (*continued*)

Fixed Effect	*b*	*SE(b)*	*t*
Perception of Partner's Emotion Dysregulation	-0.02	0.03	-0.69
Self-disclosure × Empathic Responding	0.03	0.02	1.37
Self-disclosure × Emotion Dysregulation	-0.01	0.01	-0.44
Empathic Responding × Emotion Dysregulation	0.03**	0.01	2.76
Self-disclosure × Empathic Responding × Emotion Dysregulation	-0.00	0.00	-0.40

**significant at p < .05; **significant at p < .01*

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